





केन्द्रीय माध्यमिक शिक्षा बोर्ड (शिक्षा मंत्रालय, भारत सरकार के अधीन एक स्वायत्त संगठन)

CENTRAL BOARD OF SECONDARY EDUCATION

(An Autonomous Organisation Under the Ministry of Education, Govt. of India)

CBSE/SE/JS/ATL/NSIC/2023

22nd August 2023

NOTIFICATION

National Space Innovation Challenge 2023

National Space Innovation Challenge (NSIC) is a **National level challenge** for young students across India to provide them an opportunity to explore the world of space-science and space innovation. Access to all necessary mentorship with pre-recorded lectures of eminent personalities in Space sector shall be provided by AIM at no-cost.

National Space Innovation Challenge (NSIC) – 2023 is an excellent way to develop and hone an innovation mindset for space sector amongst the students. Top individuals will get exciting prizes ranging from SpaceSat kits, certifications from AIM and ISRO.

NSIC-2023 is free and open for all students of classes V-XII of any school (ATL Schools and non-ATL Schools) located in India.

Students shall be ideating and working on exciting new innovations like Space Junk collection robot, Reusable Rocket Design, Satellite Design and Indian Spaceship design for Mars from 11th August 2023 to 20th September 2023.

- Link for participation <u>https://navarsedutech.com/nsic/</u>
- Last Date for submission of project 20th September 2023

Please refer to the attached documents for more details about National Space Innovation Challenge (NSIC) - 2023.

Principals of schools affiliated to the Board are urged to encourage their students to participate in the National Space Innovation Challenge (NSIC) 2023.

RESWASIT (Saha

Dr. Biswajit Saha Director (Skill Education)

Encl: 1. Brochure of National Space Innovation Challenge

2. Student Manual for Registration





(An Autonomous Organisation Under the Ministry of Education, Govt. of India)

Copy to the respective Heads of Directorates, Organizations and Institutions as indicated below with a request to disseminate the information to all the schools under their jurisdiction:

- 1. The Commissioner, Kendriya Vidyalaya Sangathan, 18, Institutional Area, Shaheed Jeet Singh Marg, Delhi 110016
- 2. The Commissioner, Navodaya Vidyalaya Samiti, B-15, Sector-62, Institutional Area, Noida 201309
- 3. The Director of Education, Directorate of Education, Govt. of NCT of Delhi, Old Secretariat, Delhi 110054
- 4. The Director of Public Instructions (Schools), Union Territory Secretariat, Sec. 9, Chandigarh 160017
- 5. The Director of Education, Govt. of Sikkim, Gangtok, Sikkim 737101
- 6. The Director of School Education, Govt. of Arunachal Pradesh, Itanagar 791111
- 7. The Director of Education, Govt. of Andaman & Nicobar Islands, Port Blair 744101
- 8. The Director, Central Tibetan School Administration, ESSESS Plaza, Community Centre, Sec. 3, Rohini
- 9. The Secretary, Sainik Schools Society, Room No.101, D-1 Wing, Sena Bhawan, New Delhi 110001
- 10. The Additional Director General of Army Education, A–Wing, Sena Bhawan, DHQ, PO, New Delhi 110001
- 11. The Secretary AWES, Integrated Headquarters of MoD (Army), FDRC Building No. 202, Shankar Vihar (Near APS), Delhi Cantt 110010
- 12. The Secretary Eklavya Model Residential Schools (EMRS), Ministry of Tribal Affairs, Government of India
- 13. The Chairman, Odisha Adarsha Vidyalaya Sangathan, N-1/9, Near Doordarshan Kendra, PO Sainik School Nayapalli, Bhubaneswar, Odisha 751005
- 14. The Deputy Secretary to Chairperson, CBSE for kind information of the Chairperson, CBSE
- 15. All the Heads of Departments of the Board
- 16. All the Regional Directors/Regional Officers/Head-COEs, CBSE with the request to send this circular to all the Heads of the affiliated schools of the Board in their respective regions for compliance
- 17. Director (Media & Public Relations), CBSE
- 18. Joint Secretary (IT), CBSE, Rouse Avenue with the request to upload this notification on the CBSE Academic website

Director (Skill Education)



'शिक्षा सदन', राऊज़ एवेन्यू, इंस्टीटूशनल एरिया, नई दिल्ली–110002 'Shiksha Sadan', 17, Rouse Avenue, Institutional Area, New Delhi – 110002









NSIC National Space Innovation Challenge

Quest for the Next Generation Space Science Innovator









ABOUT NATIONAL SPACE INNOVATION CHALLENGE

With the privatization of space, several Global and National brands have changed the space exploration industry and so have their Nations' ambitions. The launch of Mission Prarambh by Skyroot Aerospace marks the successful entry of private players into the Indian space sector. This is the stepping stone to make space more accessible, affordable, and more efficient.

NSIC 2023 is a National-level campaign designed to ignite future space entrepreneurs by filling the gaps in the constantly growing Indian space economy and future space workforce. It's a National platform to get inspired by industry leaders, seek opportunities for exploration, innovate and build your own sustainable solution, and showcase your innovation to the world.



LAUNCH TO THE FINALE









National Space Innovation Challenge (NSIC) is designed on the foundation of a very organic learning process that starts with inspiration. We strive to inspire the next generation to take up space as a career. This inspiration will drive them on a path of learning and innovation. That's when the challenge actually starts to get interesting. The young minds will then showcase their innovation and the best innovations will be awarded by the esteemed jury.

Let's come together and make India the next Space capital of the World.

WHAT YOU GET?

Get Inspired: Learn directly from Industry experts Seek Opportunities: Learn the opportunities in Space Innovate your Way: Build a sustainable solution Showcase to the World: Present your idea to the World Win Exciting Prizes: Meet your heroes and win goodies







PROGRAM BENEFITS FOR STUDENTS

- A repository of technical skills, mentor videos, do-it-yourself content, assignments & report submission portal to enable students to find a space problem, ideate and find a sustainable solution of their own. It gives students a good learning experience and lifetime access to the digital video repository.
- Exclusive entry to the world of Astronomy & Space via Masterclass Sessions by experts, Industry leaders through pre-recorded and self-paced learning video sessions.
- Pre-recorded mentor sessions and the subject videos play a significant role in transforming the next generation of tinkerers into budding space scientists and problem solvers.
- Exemplary recognition opportunities, prizes and certificates to be won for all.

RECOGNITION

1. **Participation Certificates:** All participants will receive participation certificates from AIM, NITI Aayog and ISRO. The certificate will be autogenerated on the LMS portal after the course completion.

2. Certificate of Excellence: Top students from both categories whose reports will be shortlisted by the jury consisting of top space industry leaders, and eminent personalities from AIM, NITI Aayog and ISRO, will win certificates of excellence.

3. **Prizes:** In addition to certificates, there are special prizes for the top performers.







STRUCTURE & CURRICULUM

The NSIC Bootcamp is delivered through a Learning Management Session (LMS). This will ensure that students can learn at their own pace and at their own convenience. The structure of the program will be as follows:

Mentor Videos	Mentor-led sessions by 6 top Space Scientists, Space Industry leaders and entrepreneurs.
Junior Scientist (Grade 5-8)	Recorded classes, useful resources and guidelines on:a. Space Junk Collection Robotb. Reusable Rocket DesignThe students will have to watch both the pre-recorded sessionand choose any one of them for the final report. The report canbe submitted in form of PPTs, Videos, or Word document.
Senior Scientist (Grade 9-12)	Recorded classes, useful resources and guidelines on: a. Satellite Design b. Indian Spaceship Design for Mars The students will have to watch both the pre-recorded session and choose any one of them for the final report.
Research Report Guidelines & Report Submission	Students have to follow the guidelines and draft their own research report from the topics mentioned above. The students will have to then upload their own research report which will be evaluated by the jury.

PROGRAM GOALS

NSIC will enable the next generation to understand the recent advancements in Space Science, develop sustainable solutions to complex problems in space and develop the zeal to build a career in Space Science and Astronomy.







MENTORS DIRECTORY



Pawan Kumar Chandana Co-Founder CEO **Skyroot Aerospace**



Dr. Vinod Kumar Director IN-SPACe



Narayan Prasad

COO Sat Search, Netherlands



Ajay Kumar CEO **Vellon Aerospace**



Suyash Singh Co-Founder GalaxEye

TERMS AND CONDITIONS

1. ATL In-Charge and School Teachers may support the students in drafting their research report.

2. This competition is open to all students of class VI to Class XII of India (ATL Schools and non-ATL Schools). Interested students may choose to participate using the LMS link.







3. Students must accurately enter the details of their contact number and email ID while registering on the portal. All communication related to NSIC will be shared on the primary contact details.

4. Please note, you should fill the online form carefully and correctly, in case of incomplete or incorrect information entered in the form, your entry may be disqualified.

5. Participants are responsible for making sure that they have the necessary rights, licenses, and/or permission for any content used in drafting the report for this challenge. AIM, NITI Aayog and its affiliates/partners are not responsible for the content made and shared by the participant. AIM, NITI Aayog reserves the right to display, distribute and reproduce participants' work on social media or elsewhere as deemed fit by AIM, NITI Aayog. AIM, NITI Aayog or its affiliates will not be responsible for any breach of Intellectual Property of any party associated with the challenge. In case of any dispute, the decision of MD, AIM shall be final and binding.















NSIC National Space Innovation Challenge

Quest for the Next Generation Space Science Innovator

Student Manual







REGISTRATION



- Logon to <u>www.navarsedutech.com</u>
- If you are a new user, then you have to first create your account on the portal. To create your account, click on the **Registration** button at the top right corner of the page.
- On the Registration page, enter your full name. Make sure that you enter your name correctly as this name will be automatically generated on the certificate after your course completion.

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- If your school is registered with ATL, select your school name from the dropdown. You can type a few characters to easily find your school name.
- If your school is not registered with ATL, click on the **No** radio button and manually enter your school name and city.
- On the Registration page, enter your full name. Make sure that you enter your name correctly as this name will be automatically generated on the certificate after your course completion.
- Then enter your grade, email ID and phone number accurately and set a password for your account. Make sure the password consists of uppercase alphabets, lower case alphabets, numbers and special characters and is atleast 8 characters long.
- Once you have entered all the details double check for possible errors and then click on the **Register** button at the bottom.

Note: You need to register on the portal only once. For all other subsequent sessions, you can use the Login button at the top right corner. Then just enter your email ID and password to access the portal.









NSIC LANDING PAGE



- Click on the NSIC link on the website header.
- The page gives a detailed overview of the NSIC program. Click on the **Enroll Now** button on the banner to navigate to the LMS landing page.



• The LMS landing page provides a detailed view of the program curriculum including the program sequence, mentor videos, masterclass videos both for junior and senior categories, research report guidelines and report submission.







LMS LANDING PAGE

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	Category	Grades	Topics		
	One	For Grade 5th - 8th	Space Junk collection robot design		
		For Grade 5th - 8th	Reusable Rockets design		·
	Two	For Grade 9th - 12th	Satellite design for Global warming studies		
		For Grade 9th = 12th	Indian Spaceshin design for Planet Mars		

- Click on the Enroll Now button to start learning. Once you are successfully enrolled to the course, you can see your course progress. The progress bar is set to 0 by default which keeps on increasing as you keep on progressing through the program.
- Click on the Start Learning Button to start your NSIC journey.









COURSE SEQUENCE

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- You are then greeted with the welcome message. After you have completely read the contents of the message, click on the **Mark as Complete** button. Please follow this important step before navigating to the next lesson.
- You will then be presented with first the mentor video. Click on the play button and watch the video completely. Then click on the **Mark as Complete** button to redirect to the next video. Follow this sequence until you complete all the mentor videos.









MASTERCLASSES



- If you are from grades 5-8, navigate to the Junior Scientist Videos and Junior Scientist Resources. You can skip the Senior Scientist Videos and Senior Scientist Resources.
- Similarly, if you are from grades 9-12, navigate to the Senior Scientist Videos and Senior Scientist Resources. You can skip the Junior Scientist Videos and Junior Scientist Resources.
- Make sure you complete all the masterclass videos of your category and go through all the resources.

RESEARCH REPORT GUIDELINES

- After completing the masterclasses, you will reach the final and most interesting stage of the program. Here you will use the learnings from the masterclass videos to design a space solution of your own.
- Read through the research report guidelines thoroughly and make sure that you have understood the research writing methodologies. Students in the Junior Scientist category can submit a presentation, word document or a video as their report. However, Senior Scientists have to submit a formal research document.







REPORT SUBMISSION

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- After you have carefully studied the Report Guidelines and drafted your project report, it's time to upload your report for the evaluators.
- Click on the **Start Assignment Submit** button at the bottom of the report submission section.
- This will take you to the research report submission interface.

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- Write a short paragraph about your report. You can use this section to highlight some of your key findings, solutions or your report methodology.
- Click on the **Choose File** button to select and upload the report from your computer. Make sure that the file size is below 50MB.
- Then, click on the Submit Assignment button to submit your report.

	Choose file	PDF or Text file is allowed	
Total File Size: Max 50 MB		Total File Size: Max 50 MB	

- Your submission will be in **Pending** status. Don't worry, this means that your submission is successfully submitted and is sent to the jury for evaluation.
- You can continue to complete the remaining lessons to complete the program.

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Note: Students from grades 5-8 can submit the report on the topic assigned in the Junior Scientist program and students from grades 9-12 can submit the report on the topic assigned in the Senior Scientist program. Failing to do so will make their entries invalid.



- After you have completed the final lesson, click on the **Back to courser home** button at the top left of the window to go back to the LMS landing page.
- Click on the **Complete Course** button to complete your course and generate the certificate.



- After clicking on the **Complete Course** button, you will see a View Certificate button.
- Click on it to view your auto-generated certificate.









• You can download the certificate by clicking on the download button or login to your account to view the certificate later.





For any queries and doubts, please reach out to us

help@navarsedutech.com

